

ABSTRACT OF THE DISCLOSURE

A single-row or multi-row rolling bearing comprising thin-walled bearing races which are made of a martensitic, through hardened steel and have the following characteristics: a surface hardness of ≥ 613 HV (56 HRC) in the area of the bearing face; a core hardness of ≥ 285 HV (28 HRC); a difference of ≥ 150 HV (9HRC) between the surface hardness and the core hardness. The core hardness is reached at a depth ranging between 8 percent of the diameter of the rolling elements and 90 percent of the wall thickness on the bottom of the track. There is a ratio of ≥ 20 between the diameter of a pitch circle T_k and the diameter of a rolling element D_w .